

Forecast Decision Support Environment

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Forecast Decision Support Environment

- NWS has been doing gridded forecasting ~10 years
- Forecasters not always using most efficient techniques
- NWS HQ and Regions interested in developing new ways to improve efficiency at WFOs/RFCs
- GSD tasked to explore new techniques to improve forecaster efficiency and awareness using AWIPS-II/SOA
- Potential for many contributors to FDSE
- Related to Operations and Services Proving Ground



Forecast Decision Support Environment

- Currently investigating potential areas of focus
 - NWS Roadmap (Red Team) Review
 - Statement of Work (OS&T)
 - Scientific Services Division Chiefs
 - Meetings with WFOs
- Focus areas fall in three broad categories



Better Situational Awareness/Automation

- Rapidly updating high-resolution analysis
 - Incorporate local observations
 - Quasi-automate the first few hours of the forecast
- Better assess potential for high-impact events
 - Database of societal impact information
 - Increase forecaster awareness of customer needs
 - Calculate areas/times of rapidly-changing weather conditions
- Automate Inter-Site differences in gridded forecast
- Express forecast in terms relative to "normal" to enhance public understanding



Forecast Confidence

- Better access to ensemble guidance
 - Identify alternative scenarios
 - PDF visualization and manipulation tools
 - Define where deterministic forecast falls within the PDF
- Define some measure of forecast confidence and disseminate to interested customers
 - Objective - How forecast has varied through time
 - Subjective - Forecaster defined confidence
 - Historic - How well recent forecasts have performed
 - Quantitative - Calculate ensemble "spread"

Research to Operations

Operations to Research

- Evaluate where forecasters best add value
- Improve diagnostic and verification techniques
- Establish process to enhance communications between operations and research
- Use NWS Roadmap as guidance along with field/regional input

Questions?

